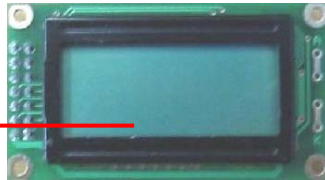


Quick Start

Renesas Starter Kit for R8C/25

LCD module



Application Board Interface

Reset switch

E8 header

LCD module connector

LIN connector

Application Board Interface

Analog adjust

User switches

User LEDs



E8 emulator

1. Installation

Do not connect the E8 emulator hardware until the software support has been installed.

1. Insert the CD into your computer's CD-ROM drive. The CD should automatically run the installation program. If the installer does not start, browse to the RSK directory from the CD root folder and double click on "setup.exe".
2. The software license agreement will be displayed. Please select the appropriate radio button and click <Next> to continue.
3. Select the software components to install. New users are strongly recommended to accept the default settings. Click <Next> to continue.
4. The destination folder is specified on the next screen. It is recommended to accept the default settings. Click <Next> to continue.
5. Click <Install>.

During the installation the Auto-Update dialog will be displayed. Do not configure Auto-Update at this time, it will be completed in the next section.

Please wait for the installation wizard to complete. This will take a few minutes during which the progress bar will stop for long periods, this is normal operation.

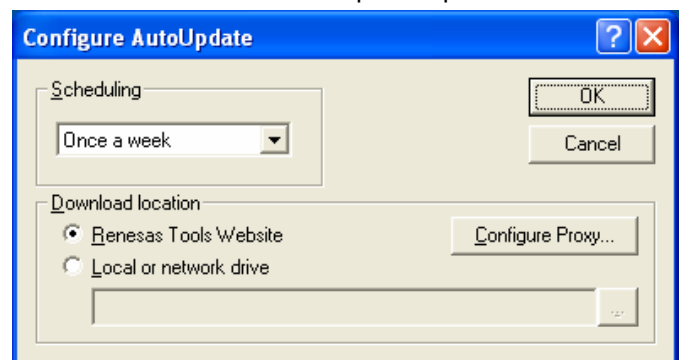
6. Click <Finish>.

2. Auto-update

After the installation has completed.

If the system was rebooted then double click the icon to configure Auto-Update.

Configure the Auto-Update settings dialog to allow your installation to be checked for required updates.



3. Connection

7. Now connect the E8 to J6 on the RSK using the ribbon cable, also connect the LCD module to J8 on the RSK ensuring that the pin 1 designation corresponds to the marking on the RSK.
 8. Connect the E8 emulator to a spare USB port.
- The "Found New Hardware" Wizard will appear. Please follow the steps below to install the drivers. Note that administrator privileges are required for a Windows™ 2000/XP machine.
9. Verify the "Recommended" option is selected and click <Next>.
 10. If using Windows XP, skip to step 12; otherwise click <Next>.
 11. Click <Next> to install the driver.
 12. Click <Finish> to close the wizard.

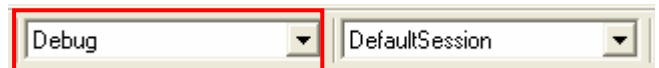
Note: The Windows driver signing dialog may be displayed. Please accept the driver to continue.

4. HEW Workspace

HEW integrates various tools such as compiler, assembler, debugger and editor into a common graphical user interface. To learn more on how to user HEW, open the HEW manual installed on your computer (Start Menu > All Programs > Renesas > High-performance Embedded Workshop > Manual Navigator).

13. Launch HEW from the Start Menu. (Start Menu > All Programs > Renesas > High-performance Embedded Workshop > High-performance Embedded Workshop)
 14. In the "Welcome" dialog box: Verify "Create New Workspace" is selected. Click <OK>.
 15. In the "New Project Workspace" dialog box: Set the "CPU Family" to "M16C", and verify the "Tool chain" is set to "Renesas M16C Standard". Select "RSKR8C25" from the left hand pane.
 16. Enter a name for the workspace. The project name will be automatically completed with the Workspace name. You can change this name to "Tutorial" if required. Click <OK>.
 17. On the "RSKR8C25- Step 1" window: Select "Tutorial" and click <Next>.
 18. On the "RSKR8C25- Step 2" window: Click <Finish>.
 19. On the Project Generator Information window: Click <OK>.
- The project that is created has two configurations. The Release configuration can be used for the final release code version. The Debug configuration allows modifications to the configuration for debugging.

20. Select the Debug build configuration in the left hand drop down list on the toolbar.



21. Click on the "Build" icon to compile, assemble and link the project.



5. Programming and Debug

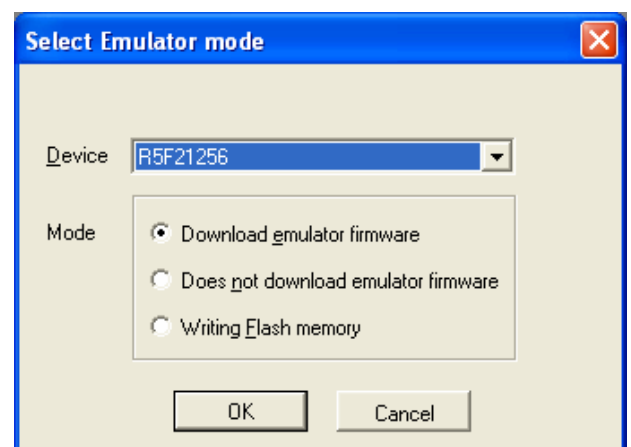
22. Ensure the "SessionR8C_E8_SYSTEM" session in the right hand drop down list on the toolbar is selected.



23. Click the <Connect> button on the debug toolbar.



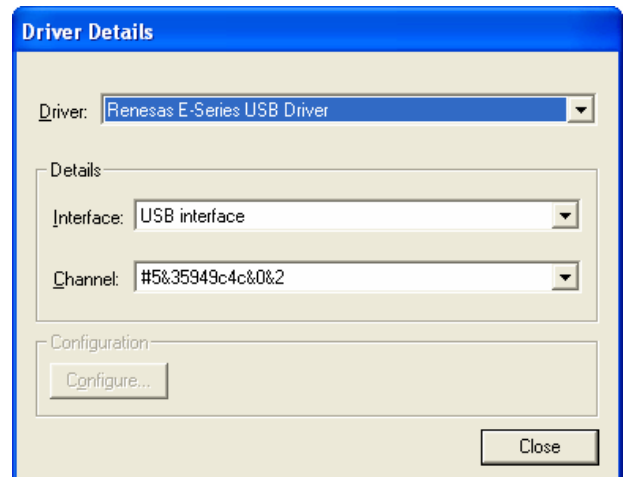
24. Select the correct device type (e.g. R5F21256 for RSKR8C25).
25. Select "Download emulator firmware".
26. Click <OK>.



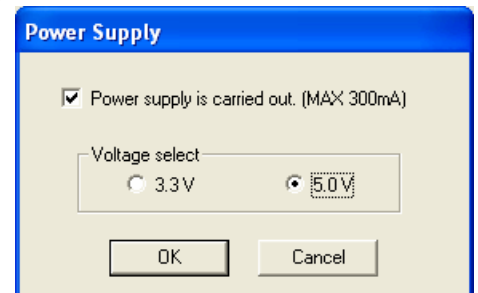
27. The first time the E8 is used the following dialog appears: Otherwise skip to step 31.



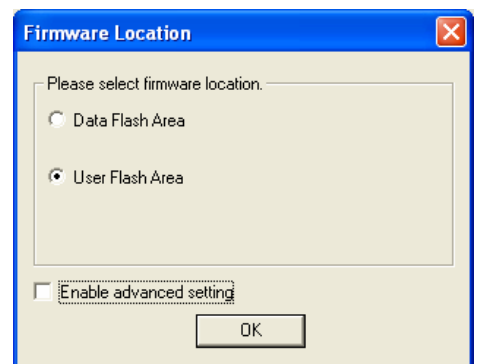
28. Click <OK>.
29. Select "Renesas E-Series USB Driver". Select "USB Interface". The channel number will vary.
30. Click <Close>.



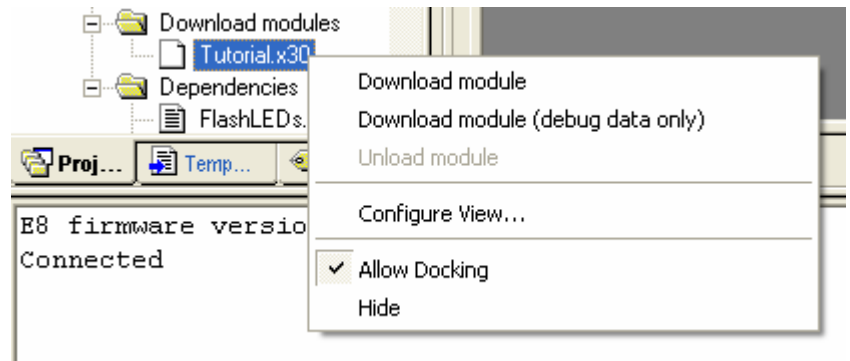
31. Accept any dialogue warning that an older version of E8 firmware is necessary to work with the application. Allow download of firmware to complete, this may take several seconds.
32. Select "Power supply is carried out" if the E8 is to provide the power to the RSK board. Otherwise connect a 5V center positive supply.
33. Select "5V" then click <OK> if "Power supply is carried out" is selected, otherwise click <OK>.





34. Enter "User Flash Area" for the firmware location. Click <OK>. The flash memory write program and E8 monitor are then downloaded to the microcontroller.



35. Right click on the download module listed in the left hand pane and select "Download module".
The code will be downloaded to the microcontroller. This may take several seconds.



36. Click the <Reset Go> button. 
The code will run and you will see the LEDs flash on the board.

37. Click the <Stop> button. 
The code will stop and the source code will be opened at the current program counter.

6. Next Step

After you have completed this quick start procedure, please review the tutorial code and sample code that came with the kit. You can add projects to the current workspace by selecting (Project > Insert Project) from the main menu. The tutorials will help you understand the device and development process using Renesas Development Tools. The Hardware manual supplied with this RSK is current at the time of publication. Please check for any updates to the device manual from the Renesas website at: www.renesas.com/rsk

7. Renesas M16C Compiler

The version of the compiler provided with this RSK is fully functional but time limited. You have 60 days to evaluate the full product before the compiler will limit the code linker to 64k bytes. Full licensed M16C compiler versions are available from your Renesas supplier.

8. Support

Online technical support and information is available at: www.renesas.com/rsk

Technical Contact Details

America: techsupport.rta@renesas.com
Europe: tools.support.eu@renesas.com
Japan: csc@renesas.com

© Renesas Solutions Corporation. 2006.
© Renesas Technology Europe Ltd. 2006.
© Renesas Technology Corporation. 2006.